b) exposing and developing the photoresist layer on the substrate to yield a developed photoresist image;

c) thermally treating the developed photoresist layer to induce crosslinking of one of more photoresist components.

19. (amended) The method of claim 17 wherein the photoresist layer is exposed to patterned radiation having a wavelength of about 248 nm.

20. (amended) The method of claim 17 wherein the photoresist layer is exposed to patterned radiation having a wavelength of less than 200 nm.

21. (amended) The method of claim 17 wherein the thermal treatment induces the flow of the developed photoresist layer.

22. (amended) The method of claim 17 wherein the substrate comprises one or more contact holes.

24. (amended) The method of claim 17 wherein the photoresist layer is heated after development to at least about 130°C.

25. (amended) The method of claim 17 wherein the photoresist layer is heated after development to at least about 150°C.

26. (amended) The method of claim 17 wherein the photoresist layer is heated after development to at least about 160°C.

27. (amended) The method of claim 17 wherein the photoresist is heated after exposure and prior to development at a temperature of not greater than about 120°C, and the pre-development heating does not cause substantial crosslinking of the photoresist layer.

Please add the following new claims.

31. The method of claim 17 wherein the photoresist groups 1) comprise acetal groups or ester groups.

32. The method of claim 17 wherein the photoresist groups 1) comprise acetal groups.

33. The method of claim 32 wherein the acetal groups have an oxygen linkage that is substituted by a secondary or tertiary carbon.

34. The method of claim 17 wherein the photoresist polymer comprises phenolic units.

35. The method of claim 17 wherein the photoresist polymer comprises cycloalkyl units.

36. The method of claim 17 wherein the photoresist polymer comprises alkylacrylate photoacid labile groups.

37. A method for treating a microelectronic wafer substrate, comprising:

a) applying a layer of a positive-acting, chemically-amplified photoresist composition on the microelectronic substrate, the photoresist composition comprising a photoactive component and a polymer that comprises 1) groups reactive to crosslinking; 2) alkyl acrylate photoacid-labile groups, and 3) phenolic groups; and